

DEC 30 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>In re United States Patent Application of:</b>	)	<b>Docket No.:</b>	<b>2771-546 CIP 2</b>
<b>Applicants:</b>	)	<b>Conf. No.:</b>	<b>2238</b>
<b>Application No.:</b>	)	<b>Art Unit:</b>	<b>2122</b>
<b>Date Filed:</b>	)	<b>Examiner:</b>	
<b>Title:</b>	)	<b>Customer No.:</b>	
<b>APPARATUS AND PROCESS</b>	)		
<b>FOR SENSING FLUORO</b>	)		
<b>SPECIES IN</b>	)		
<b>SEMICONDUCTOR</b>	)		
<b>PROCESSING SYSTEMS</b>	)		

**23448**

**FACSIMILE TRANSMISSION CERTIFICATE****ATTN: Examiner****Fax No. (571) 273-8300**

I hereby certify that this document is being filed in the United States Patent and Trademark Office, via facsimile transmission to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 30, 2005, to United States Patent and Trademark Office facsimile transmission number (571) 273-8300.

5

Number of Pages (including cover)

  
Joyce Gevirtzman

December 30, 2005

Date

**SUBMISSION OF POWER OF ATTORNEY AND STATEMENT UNDER  
37 CFR 3.73(b) FOR U.S. PATENT APPLICATION NO. 10/784,750**

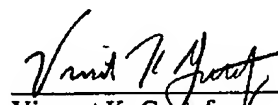
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

2771-546 CIP 2

Enclosed and submitted herewith is a Power of Attorney to Prosecute Applications before the USPTO (Form PTO/SB/80), and a Statement Under 37 CFR 3.73(b) (Form PTO/SB/96) for the above-identified U.S. patent application.

Respectfully submitted,



Vincent K. Gustafson

Reg. No. 46,182

Attorney for Applicants

INTELLECTUAL PROPERTY/  
TECHNOLOGY LAW  
Phone: (919) 419-9350  
Fax: (919) 419-9354  
Attorney File No.: 2771-546 CIP 2

RECEIVED  
CENTRAL FAX CENTER

DEC 30 2005

9194199354

IPTL

11:53:43 a.m. 12-30-2005

3 /5

PTO/SB/96 (09-04)

Approved for use through 7/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Dimeo Jr., et al.

Application No./Patent No.: 10/784,750

Filed/Issued Date: February 23, 2004

Entitled: **APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS**

Advanced Technology Materials, Inc., a

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or

2. ☐ an assignee of less than the entire right, title, and interest.

The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel/Frame 016492/0428, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel/Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel/Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at Reel/Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

(NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08)

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.



Signature

December 30, 2005

Date

Vincent K. Gustafson

Printed or Typed Name

(919) 419-9350

Telephone Number

Attorney for Applicants

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED  
CENTRAL FAX CENTER

9194199354

IPTL

DEC 3 0 2005

11:54:09 a.m.

12-30-2005

4 /5



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SEPTEMBER 06, 2005

PTAS

**\*700193544A\***

\*700193544A\*

STEVEN HULTQUIST  
INTELLECTUAL PROPERTY/TECHNOLOGY LAW  
P.O. BOX 14329  
RESEARCH TRIANGLE PARK, NC 27709

RECEIVED

SEP 6 2005

IPTL

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES DIVISION, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 07/08/2005

REEL/FRAME: 016492/0428  
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).  
DOCKET NUMBER: 2771-546-CIP2

ASSIGNOR:

KRAMER, RICHARD

DOC DATE: 04/11/2005

ASSIGNEE:

ADVANCED TECHNOLOGY MATERIALS,  
INC.  
7 COMMERCE DRIVE  
DANBURY, CONNECTICUT 06810

SERIAL NUMBER: 10784750

FILING DATE: 02/23/2004

PATENT NUMBER:

ISSUE DATE:

TITLE: APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR  
PROCESSING SYSTEMS

RECEIVED  
CENTRAL FAX CENTER

11:54:29 a.m.

12-30-2005

5/5

DEC 30 2005

PTO/SB/86 (04-05)

Approved for use through 11/30/2005. OMB 0851-0035

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☒ Practitioners associated with the Customer Number:

23448

AND

☒ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number
John Boyd	38,055		
Margaret Chappuis	45,735		

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☒

The address associated with Customer Number:

23448

OR

<input type="checkbox"/> Firm or individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

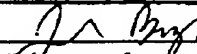
Assignee Name and Address:

Advanced Technology Materials, Inc.  
7 Commerce Drive  
Danbury, Connecticut 06810

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

## SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	01.12.2005
Name	John Boyd, Esq.	Telephone	(203) 794-1100
Title	Chief Intellectual Property Counsel		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.